

Manos Application

DEADLINE FOR RECEIPT OF APPLICATION: JANUARY 24, 2005

PLEASE RETURN ALL ENCLOSED FORMS WITH THIS APPLICATION TO THE STUDENTS MANOS REPRESENTATIVE.
6th Graders Will Be Required to Choose Between "Fun with Math and Money" and "Computers", please indicate your preference: _____ Math and Money _____ Computers

7th and 8th Graders please number in order of preference (from 1 to 6) the class you wish to attend. If your first preference is filled, you will be assigned to your next available preference.

_____ Electronics _____ Chemistry _____ Physics _____ Robotics _____ Fun with Math and Money _____ Computers

Student's Full Name: _____ Date of Birth MM/DD/YY: _____

Parent/Guardian Name: _____

Student's Mailing address: _____

City: _____ State: _____ Zip: _____ Phone: _____

School: _____ Grade Level: _____

Past Participant? (check one) Yes _____ No _____ Which Class? _____

The following optional information does not affect participation in the program:

Check One: Male _____ Female _____

Check One: Hispanic _____ American Indian _____ Asian _____ African American _____ Other _____

Where is the program held?

Participating Schools: John Adams MS,
Truman MS, Jimmy Carter MS

Location: West Mesa High School-Science Bldg.
6701 Fortuna NW

Dates: Monday/Wednesday
February 16-March 16, 2005

**MANDATORY PARENT ORIENTATION
SCHEDULED FOR FEBRUARY 16, 2005**

TIME: 6:00 P.M.

LOCATION: WEST MESA HS PERFORMING
ARTS CENTER

Participating Schools: Ernie Pyle MS, Pajarito
Academy, Polk MS, Harrison MS, Barcelona
Academy

Location: Rio Grande High School-Science Bldg.
2300 Arenal Rd SW

Dates: Tuesday/Thursday
February 22-March 17, 2005

**MANDATORY PARENT ORIENTATION
SCHEDULED FOR FEBRUARY 22, 2005**

TIME: 6:00 P.M.

LOCATION: RIO GRANDE HS CAFETERIA

Times:

4 PM to 5 PM

5 PM to 5:10 PM - SNACK BREAK IN CAFETERIA

5:10 PM to 6PM

Transportation:

Students are transported via bus from their
respective Middle School free of charge, and
MUST be picked up by class dismissal promptly
At 6:00 p.m.

Manos Contact

Brenda Barajas-Romero - Manos Coordinator
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Albuquerque, NM 87185-0132

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Manos Science & Engineering Program Sponsored by Sandia
National Laboratories
Diversity, EEO & AA Department

Sandia is a Multiprogram Laboratory operated by Sandia Corporation, a
Lockheed Martin Company, for the United States Department of Energy's
National Nuclear Security Administration under contract DE-AC04-
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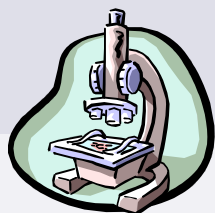
February 16 -
March 17
2005



Learning Hands On For The Future

What is Manos?

Manos Hands-on Science and Engineering Program is an educational supplement targeting Hispanic middle school students. The Program is sponsored by Sandia National Laboratories' Hispanic Leadership Outreach Committee, Diversity, EEO & AA Department, Albuquerque Public Schools and the University of New Mexico. This program is designed to introduce science, engineering, and math concepts to middle school students and spark their interest in pursuing careers in science and engineering. This program is offered each Spring for students in grades 6th - 8th. Students and parents are encouraged to participate and volunteer.



Workshops:

Manos provides students the opportunity for early high-tech business involvement with local communities. We inspire young minds through engineering and scientific experiences. Our focus is to increase and promote student academic excellence at the precollege level. Manos nurtures "hands-on" science and engineering experiences primarily for Hispanic students, but open to all students. We work to improve students' academic rate of success and personal self-esteem. The Manos Program continues to foster and expand awareness of self-respect for the contributions and achievements of Hispanic inventors and scientists. Through interdisciplinary activities, "Great Minds" and "Creative Thinkers" are excited about their future.

What is the purpose of the Manos Program?



- Develop awareness and pride in accomplishments of Hispanic professionals and inventors.
- Increase the pool of Hispanic students who pursue engineering and science university degrees.
- Support the development of a scientific and technically trained student-base with hands-on technology experiences.

What must a student do to participate in the program?

Students must currently be enrolled in grades 6th through 8th. ***Parents must complete, sign, and return all enclosed documents (Student Code of Conduct and Release & Indemnity Agreement) with application.*** ***Students may not begin the program without completed forms.*** There is no cost to the student for attending the program. Students who need special assistance should call the Program Coordinator at 845-9589 prior to the commencement of the program.

What kinds of classes will students take?



- **Physics** - How does a rocket work and fly? Do you think you can build and fly a rocket? Learn the principles of physics by conducting experiments in: force, mass, energy, friction, momentum, fluids, heat, magnetism and optics.
- **Chemistry** - How do they make fireworks different colors? What makes bread rise? Is shampoo really "pH balanced" like the commercials say and are all sunscreens the same? How does chemistry help to investigate a crime scene?
- **Electronics** - What is a component? What is integrated circuitry and how does it work? What makes a computer work? Who is *Ohm* and what is it? How is the flow of electricity controlled?
- **Fun with Math & Money** - Can you guess how many Red M&Ms are in a jar? Do you know what PI is? Do you know how to make your money "grow"? How can you visit 50 cities in as little time as possible? This class uses fun games to help you answer these questions and more.
- **Computer Design** - Have fun with computers! What makes a computer tick and how can you use it? Take a computer apart. Connect to the internet. Use email to communicate with friends. Build your own personal web page for others to see. Program and control a robot to make it do what you want it to. Do a scavenger hunt, dissect a frog and solve problems.
- **Robotics** - Students learn how to build and program robots and work with **LEGO MINDSTORM KITS**. Students will learn how to make robots follow line, how to use touch and light sensors. The students will learn about career pathways in high wage, high technology fields. They will also learn about the importance of teamwork in a competitive environment.

Great Minds On The Move!

http://www.sandia.gov/Human_Resources/manos.html